Complete if Known tute for form 1449A/PTO **Application Number** 10/609,012 June 27, 2003 Filing Date INFORMATION DISCLOSURE Theo T. Nikiforov STATEMENT BY APPLICANT First Named Inventor **Art Unit** 1637 **Examiner Name** (use as many sheets as necessary) Jeffrey Siew-100/07933 of Attorney Docket Number Sheet

		U.	S. PATENT DO	CUMENTS	
Examiner Initials	Cite No.	Document No. Number - Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, lines, Where Relevant Passages or Relevant Figures Appeal
TIS	AA	US-5,143,854	09-01-1992	Pirrung et al.	
	AB	√ US-5,527,688	06-18-1996	Mallia	
	AC	√ US-5,587,285	12-26-1996	Cloyd et al.	
	AD	√ US-5,646,001	07-08-1997	Terstappen et al.	
	AE	√ US-5,665,865	09-9-1997	Lemer et al.	
	AF	J US-5,688,648	11-18-1997	Mathies et al.	
	AG	√ US-5,707,804	01-13-1998	Mathies et al.	
	АН	√ US-5,728,528	03-17-1998	Mathies et al.	
	Al	√ US-5,744,305	04-28-1998	Fodor et al.	
	AJ	√ US-5,747,247	05-05-1998	Kowlacyzkowski et al.	
	AK	√ US-5,779,868	07-14-1998	Parce et al.	
	AL	√ US-5,783,687	07-21-1998	Glazer et al.	
	AM	√ US-5,853,992	12-29-1998	Glazer et al.	
	AN	√ US-5,858,195	01-12-1999	Ramsey	
	AO	√ US-5,869,255	02-09-1999	Mathies et al.	
	AP	√ US-5,885,470	03-23-1999	Parce et al.	
	AQ	J US-5,925,558	07-20-1999	Tsien et al.	
	AR	√ US-6,071,748	06-06-2000	Modlin et al.	
	AS	√ US-6,087,107	07-11-2000	Sheffield et al.	
	AT	√ US-6,100,039	08-08-2000	Burke et al.	
	AU	J US-6,149,787	11-21-2000	Chow et al.	
	AV	√ US-6,153,073	11-28-2000	Dubrow et al.	
	AW	J , US-6,203,994	03-20-2001	Epps et al.	
	AX	J US-6,326,142	12-04-2001	Royer	
73	AY	∫ US-6,503,709	01-07-2003	Bekkaoui et al.	
	AZ	U6-09/321,309		Sundberg et al.	
+5	ВА	US-2002/0061546	05-23-2002	Tsien et al.	
Examine Signatu		Teesa Strell	eclia	Date Considered	12/13/05

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Subs	stitute for form 1449A/PTO	C	omplete if Known	VAE X
		Application Number	10/609,012	10
INF	ORMATION DISCLOSURE	Filing Date	June 27, 2003	A com 2 c
STA	ATEMENT BY APPLICANT	First Named Inventor	Theo T. Nikiforov	OCT 0 6 2023 🚡
		Art Unit	1637	\ Z
	(use as many sheets as necessary)	Examiner Name	Jeffrey Siew Tees	astrellaria
Sheet	of	Attorney Docket Number	100/07933	6 IHIA

			FOREIG	N PATENT DO	CUMENTS		
	miner itials	Cite No.	Foreign Patent Document Country Code - Number - Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Т
T	51	вв	WO-95/15981	06-15-1995	Univ. Utah		
	V	ВС	WO-98/00231	01-08-1998	Caliper		
	ν	BD	WO-98/00705	01-08-1998	Caliper		
	7	BE	WO-98/18956	05-07-1998	Panvera		
	7	BF	WO-98/45481	10-15-1998	Caliper		
	١	₽G	WO-99/16162	04-01-1999	Caliper		
	7	ВН	WO-99/23466	05-14-1999	LJL Biosystems		
	1	ві	WO-00/23785	04-27-2000	LJL Biosystems		
T	1 ₅ v	ВЈ	EP-0 781 853	07-02-1997	Eli Lilly Co.		

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Cite Include Initials No. ser		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	т
TS	BK	ANDERSSON, L. et al., "Isolation of Phosphoproteins by Immobilized Metal(Fe3+) Affinity Chromoatography," Anal Biochem. (1986) 154:250-254	
	/BL	CHECOVICH, W.J. et al., "Fluorescence Polarization-a New Tool for Cell and Molecular Biology," Nature (1995) 75:254-256	a
>	ВМ	CHEN, W. et al., "Fluorescence Polarization in Homogeneous Nucleic Acid Analysis," Genome Res. (1999) 9:492-8 May	
7	BN	DANDLIKER, B.B. et al., "Quantification of the Antigen-Antibody Reaction by the Polarization of Fluorescence," Biochem Biophys Res Commun. (1961) 5:299-304	6
	во	DANDLIKER, B.B. et al., "Fluorescence Polarization in Immunochemistry," Immunochemistry (1970) 7:799	a
/	ÆP	DANDLIKER, B.B. et al., "Fluorescence Polarization Immunoassay. Theory and Experimental Method," Immunochemistry (1973) 10:219	9
	BQ	DESHPANDE, S.S. et al., "A Robust, Versatile Tyrosine Kinase Assay for HTS in Drug Discovery," Prog. Biomed. Optics (SPIE) (1999) 3603:251-61	Ü
\ \	BR	DEVLIN, R. et al., "Homogeneous Detection of Nucleic Acids by Transient-State Polarized Fluorescence," Clin. Chem. (1993) 39:1939	
750	BS	EGHOLM, M. et al., <u>Nature</u> (1993) 365:566-568	1.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Tersa Structectica

Examiner

Signature

Date

Considered

12/21/05

Substitute for form 1449A/PTO Complete if Known	
Application Number 10/609,012	-62/-
INFORMATION DISCLOSURE Filing Date June 27, 2003	1:
STATEMENT BY APPLICANT First Named Inventor Theo T. Nikiforov 05	2003 B
Art Unit 1637	हा
(use as many sheets as necessary) Examiner Name Jeffrey Siew-Teres Out the	RINE
Sheet of Attorney Docket Number 100/07933	AUE

12 BT	EVETT, J. et al., "DNA-Polylysine Interaction as Studied by Polarization of Fluorescence," Ann. N.Y. Acad. Sci. (1969) 158:210-22	
√BU	GIBSON, et al., "A Homogeneous Method for Genotyping with Fluorescence Polarization," Clinical Chemistry (1997) 43:1336-41	
BV	GINGERAS, T.R. et al., "A Spectrofluorometric Method for Measurement of Restriction Endonuclease Activity Based on Fluorescence Polarization," J. Cell. Biochem. Suppl. (1992) Suppl. 17 Part C, p. 173	61
BW	GLOTOV, B.O. et al., "Histone H1-DNA Interaction: Influence of Phosphorylation on the Interaction of Histone H1 with Linear Fragmented DNA," Nucleic Acids Research (1977) 4:1065:82	
ВХ	GREEN, R.C. "Fluorescence Polarization Colloid Charge Titration: Development and Application for Feed Forward Coagulant Control at Water Treatment Facilities," Ph.D. Thesis, University of Colorado (1997)	
BY	ICHIMURA, S. et al., "The Interaction of 8-Anilino-1-Naphthalanesulfonatate with Polylysine and Plyarginine," Biopolymers (1977) 16:1449-64	
BZ	JISKOOT, W. et al., "Preparation and Application of a Fluorescein-labled Peptide for Determining the Affinity Constant of a Monoclonal Antibody-Hapten Complex by Fluorescence Polarization," Anal. Biochem. (1991) 196:421	۰
t CA	JOLLEY, M.E. et al., "Fluorescence Polarization Immunoassay I. Monitoring Aminoglycoside Antibiotics in Serum and Plasma," Clinical Chemistry (1981) 27:1190-97	
і СВ	JOLLEY, M.E. et al., "Fluorescence Polarization Assays for the Detection of Proteases and Their Inhibitors," Journal of Biomolecular Screening (1996) 1:33-38	u
/cc	JORDEN, R.M. et al., "Colloid Charge Capacity-Its Measurement, Problems and Promise," Chemical Water and Wastewater Treatment IV (1997) 121-35	
V CD	KUMKE, M.U. et al., "Hybridization of Fluorescein-Labeled DNA Oligomers Detected by Fluorescence Anisotropy with Protein Binding Enhancement," Anal. Chem. (1995) 67:3945-51	
CE	LAURENCE, D.J.R., "A Study of the Adsorption of Dyes on Bovine Serum Albumin by the Method of Polarization of Fluorescence," Biomechanical Journal (1952) 51:165-77 "	
↓ CF	LEVINE, L.M. et al., <u>Anal. Biochem.</u> (1997) 247:83-88	
¢G	LEVISON, S.A. et al., "Fluorescence Polarization Measurement of the Hormone-Binding Site Interaction," Endocrinology (1976) 99:1129	8
СН	LUNDBLAD, J.R., et al., "Fluorescence Polarization Analysis of Protein-DNA and Protein-Protein Interactions," Molecular Endocrinology (1996) 10:607-612	~
TS CI	LYNCH, B.A. et al., "A Fluorescence Polarization Based Src-SH2 Binding Assay," Analytical Biochemistry (1997) 247:77-82	

Examiner	Teresa Strelectia	Date	12/21/05
Signature	(5,600(0,7000000000	Considered	1 (04)

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Complete if Known Substitute for form 1449A/PTO **Application Number** 10/609,012 June 27, 2003 INFORMATION DISCLOSURE Filing Date Theo T. Nikiforov STATEMENT BY APPLICANT First Named Inventor Art Unit 1637 (use as many sheets as necessary) **Examiner Name** Jeffrey Siew Teveso Attorney Docket Number 100/07933 of Sheet CJ MURAKAMI, A. et al., "Nucl. Acids Res. (1991) 19:4097-4102 OWICKI, J.C. et al., "Application of Fluorescence Polarization Assays in High-Throughput CK Screening, Genetic Engineering News (1997) OZERS, M.S. et al., "Equilibrium Binding of Estrogen Receptor with DNA Using Fluorescence CL Anistropy," J. Biol. Chem. (1997) 272:30405-11 SCHADE, S.Z. et al., "BODIPY-a-Casein, a pH-Independent Protein Substrate for Protease ĆМ Assays Using Fluorescence Polarization," Analytical Biochemistry (1996) 243:1-7 SMALLSHAW, J.C. et al., "Determination of the Binding Constants for Three HPr-Specific CN Monoclonal Antibodies and Their Fab Fragments," Mol. Biol. (1998) 280:765-74 TANHA, J. et al., "Thermodynamic Analysis of Monoclonal Antibody Binding to Duplex DNA," CO Nucleic Acids Research (1997) 25:1442-49 ICP TYAGI, S. et al., Nature Biotech, (1996), 14:303-308 CQ TYAGI, S. et al., Nature Biotech, (1998), 16:49-53 WALKER, G.T. et al., "Strand Displacement Amplification (SDA) and Transient-State CR Ð Fluorescence Polarization Detection of Mycobacterium Tuberculosis DNA," Clinical Chemistry (1996) 42:9-13 WALKER, G.T. et al., Nucl. Acids Res. (1996), 24(2):34-353- 3/48-353 CS *I*CT WEBER, G. "Rotational Brownian Motion and Polarization of the Fluorescence of Solutions," Adv. Protein Chem. (1953) 8:415 WEI, A. et al., "Use of Synthetic Peptides as Tracer Antigens in Fluorescence Polarization eÙ В Immunoassays of High Molecular Weight Analytes," Anal. Chem. (1993) 65:3372 WILKINSON, D. "Tyr'd and True: Immunochemical Reagents and Kits for Studying Tyrosine CV 0 Phosphorylation," The Scientist (1999) pp. 13-21 .CW WU, P. et al., ""A High-Throughput STAT Binding Assay Using Fluorescence Polarization," Anal. Biochem. (1997) 249:29-36 PanVera Corporation "Fluorescence Polarization Applications Guide", Madison, WI

Examiner Signature	Teesa Stuelectia	Date Considered	12/21/Or
_ Olymature		Ounsidered	<u> </u>

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Complete if Known Substitute for form 1449A/PTO 10/609,012 Application Number INFORMATION DISCLOSURE THE STREET & TRANS June 27, 2003 Filing Date Theo T. Nikiforov STATEMENT BY APPLICANT First Named Inventor 1637 **Art Unit Examiner Name** -Jeffrey-Siew Teesa studeda (use as many sheets as necessary) 100/07933 **Attorney Docket Number** of Sheet

	U.S. PATENT DOCUMENTS						
Examiner Initials	Cite No.	Document No. Number - Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, lines, Where Relevant Passages or Relevant Figures Appeal		
TS	AA	√ 5,804,395	09-08-1998	Schade et al.			
	AB	J 6,287,774	09-11-2001	Nikiforov			
	AC	√ 6,436,646	08-20-2002	Nikiforov			
T	AD	J 6,472,141	10-29-2002	Nikiforov			

		FOREIG	N PATENT DO	CUMENTS		
Examiner Initials	Cite No.	Foreign Patent Document Country Code - Number - KInd Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	т
12 0	AE	WO-9412665	06-09-1994	R-P Technologies		
TJU	AF	WO-9964840	07-07-1999	Caliper		
	AG	WO-0023785	04-27-2000	LJL Biosystems	duplicate	
	AH	EP-781 853	07-02-1997	Eli Lilly Co.	durlicate	
V12T	Al	EP- 786 666	07-30-1997	Hoffman La Roche	,	

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	,
Examiner Cite		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and-or country where published.	7
		COFFIN, J. et al., "Detection of Phosphopeptides by Fluorescence Polarization in the Presence of Cationic Polyamino Acids: Application to Kinase Assays" <u>Anal. Biochem.</u> (2000) 278:206-212	
	AK	ERICKSON, A.C. et al., "Metal (Fe3+) Affinity Chromatography: Differential Adsorption of Tau Phosphoproteins" J. Neurosci. Methods (1993) 46-245-249	
	AL.	MUSCZYNSKA, G. et al., "Selective Asorption of Phosphoproteins on Gel-Immobilized Ferric Chelate" <u>Biochemistry</u> (1986) 25-6850-6853	
	AM	NIKIFOROV, THEO T. et al., "Detection of Hybrid Formation between Peptide Nucleic Acids and DNA by Fluorescence Polarization in the Presence of Polylysine" <u>Anal. Biochem.</u> (1999) 275:248-253	
	AN	PARK, Y-W. et al., "Homogeneous Proximity Tyrosine Kinase Assays: Scintillation Proximity Assay versus Homogeneous Time-Resolved Fluroescence" Anal. Biochem. (1999) 269:94-104	
75 E	AO	SEETHALA, R. et al., "A Homogeneous, Fluorescence Polaration Assay for Src-Family Tyrosine Kinases" Anal. Biochem. (1997) 253:210-218	

<u> </u>		16:	···
I Examiner	510,000 Slavela also	Date	12/12/05
1	Teresa Strelection	Considered	(~//5/00
Signature		Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

(2)	일	
e for form 1449A/PTO	Complete if Known	
1 60	Application Number	10/609,012
MATION DISCLOSURE &	Filing Date	June 27, 2003
MENT BY APPLICANCE TENT & TOPP	First Named Inventor Theo T. Nikiforov	
	Art Unit	1637
as many sheets as necessary)	Examiner Name	Jeffry Siew Teresa Structecle
of	Attorney Docket Number	100/07933
	MATION DISCLOSURE MENT BY APPLICANTIFAT & TOPAGE as many sheets as necessary)	MATION DISCLOSURE MENT BY APPLICANTIFIT THE First Named Inventor Art Unit as many sheets as necessary) C Application Number Filing Date First Named Inventor Art Unit Examiner Name

75	AP	SEETHALA, R. et al., "A Fluorescence Polarization Competition Immunoassay for Tyrosine Kinases" Anal. Biochem. (1998) 255:257-262	
TSI	AQ	URIOS, P. et al., "Adaptation of Fluorescence Polarization Immunoassay to the Assay of Macromolecules" <u>Anal. Biochem.</u> (1990) 185:308-312	
	AR	Molecular Devices Corporation's redacted version of its Opposition to Caliper's Motion for Preliminary Injection in pending litigation US Civil Case No. C-02-1837 (CRB) and supporting declaration by Andrew R. Barron and Richard Sportsman	~
<u></u>	AS	Claim Construction Order, US District Court, Northern District of California, Case No. C 02-01837, September 3, 2003	1

Examiner		C1 . 0 0	Date	1-11010-	
Signature	leresa	Stullella	Considered	[2113105]	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

PTO/SB/08B (08-03) Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paper aperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Complete if Known **Application Number** 10/609,012 Filing Date INFORMATION DISCLOSURE 06/27/2003 STATEMENT BY APPLICANT First Named Inventor Theo T. Nikiforov Art Unit 1645 (Use as many sheets as necessary) Teesa Stuckella **Examiner Name** Unknown-

Attorney Docket Number

1

of

100/07933

Sheet

1

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	CA	SEETHALA, Ramakrishna, et al., "A Homogenous Fluerescence Polarization Assay for Src-Family-Tyrosine Kinases," Anal. Chem., Vol. 253, 11/15/1997, pgs. 210-218.	
	- GB	SEETHALA. Ramakrishna. et al., "A Fluorescence Polarization Competition Immunoassay for Tyrosine Kinases," Anal. Chem., Vol. 255, 1/15/1998, pgs. 257-262.	

Examiner		Date	10/12/05
Signature	Teres a Stuckedla	Considered	(2/(3/0)

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: